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IN THE CLAIMS:

Claim 1 (Cancelled).

2. (Currently amended) The apparatus of ~~claim 1~~ claim 12, wherein the device detects fuel vapor flow based upon a detected change in temperature.
3. (Original) The apparatus of claim 2, wherein the device includes a thermistor.
4. (Original) The apparatus of claim 3, wherein the device includes a resistor thermally coupled with the thermistor.
5. (Currently amended) The apparatus of ~~claim 1~~ claim 12, wherein the valve pressure operable device is actuated by forces originating from a change in pressure between the first and second portions.
6. (Currently amended) The apparatus of ~~claim 1~~ claim 12, wherein the valve is a pressure operable device comprises a valve.
7. (Currently amended) The apparatus of ~~claim 1~~ claim 12, wherein the sensor resides on a circuit board and the circuit board includes a pressure sensor.
8. (Original) The apparatus of claim 7, wherein the circuit board is disposed in the first portion and the first portion includes a coupling end for securing it directly to a canister.
9. (Currently amended) The apparatus of ~~claim 1~~ claim 12, wherein the device calculates a flow rate.
10. (Currently amended) The apparatus of ~~claim 1~~ claim 12, wherein the device has a first and second configuration, the first configuration including an enabled heating element and the second configuration including a disabled heating element.

Claim 11 (Cancelled).

12. (Currently amended) A fuel vapor management [[The]] apparatus of claim 11, wherein the for an internal combustion engine, comprising:

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a housing defining an interior chamber;
a device including a temperature sensor disposed within the chamber, the device being
configured to detect fuel vapor flow based upon a temperature detected by the sensor;
a pressure operable device further includes separating the interior chamber into first and
second portions, the temperature sensor being disposed in the first portion, the first portion being
in continuous fluid communication with a fuel vapor collection canister and the second portion
being isolated from the canister by the poppet, and the pressure operable device including a
poppet movable along an axis and a seal adapted to cooperatively engage the poppet, wherein a
first arrangement of the pressure operable device occurs when there is a first negative pressure
level in the fuel vapor collection canister relative to the vent port and the seal is in a first
deformed configuration, a second arrangement of the pressure operable device permits a first
fluid flow from the vent port to the fuel vapor collection canister when the seal is in a second
deformed configuration, and a third arrangement of the pressure operable device permits a
second fluid flow from the fuel vapor collection canister to the vent port when the seal is in an
un-deformed configuration, and wherein [[the]] a pressure sensor disposed in the first portion
signals the first arrangement of the pressure operable device.

13. (Original) The apparatus of claim 12, wherein the poppet is configured to move along an axis between a first position, a second position, and an intermediate position between the first and second positions.

14. (Original) The apparatus of claim 13, wherein the first and second arrangements of the pressure operable device comprise the poppet in the second position, and the third arrangement of the pressure operable device comprise the poppet in the first position.

15. (Currently amended) The ~~method apparatus~~ of claim 14, wherein a spring biases the poppet towards the second position.

16. (Currently amended) A fuel vapor management apparatus for an internal combustion engine, comprising:

a housing, the housing defining an interior chamber and a valve pressure operable device
separating the interior chamber into first and second portions, the pressure operable device
including a poppet movable along an axis and a seal adapted to cooperatively engage the poppet,

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wherein a first arrangement of the pressure operable device occurs when there is a first negative pressure level in the fuel vapor collection canister relative to the vent port and the seal is in a first deformed configuration, a second arrangement of the pressure operable device permits a first fluid flow from the vent port to the fuel vapor collection canister when the seal is in a second deformed configuration, and a third arrangement of the pressure operable device permits a second fluid flow from the fuel vapor collection canister to the vent port when the seal is in an un-deformed configuration; and

means for measuring fluid flow disposed within the interior chamber.

17. (Original) The apparatus of claim 16, wherein each of the first and second portions include one and only one fluid port.

18. (Original) The apparatus of claim 16, wherein the means for measuring fluid flow includes a control circuit including a leak detection means.

19. (Original) The apparatus of claim 18, wherein the leak detection means comprises a pressure sensor.

20. (Original) The apparatus of claim 18, wherein the means for measuring fluid flow through the housing includes a temperature sensor.

21. (Original) The apparatus of claim 20, wherein the leak detection means includes the temperature sensor.

22. (Original) The apparatus of claim 18, wherein the leak detection means comprises the means for measuring fluid flow through the housing.

23. (Original) The apparatus of claim 22, wherein the means for measuring fluid flow through the housing includes a thermistor adapted for being heated by a voltage applied across the thermistor.

24. (Original) The apparatus of claim 16, wherein the means for measuring fluid flow through the housing includes a thermistor and heating resistor.

Claim 25 (Cancelled).

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26. (Currently amended) The apparatus of ~~claim 25~~ claim 32, wherein the flow sensor includes heating element.

27. (Original) The apparatus of claim 26, wherein the heating element is a resistor.

28. (Original) The apparatus of claim 27, wherein the thermistor and resistor are thermally bonded using one of epoxy and placing the thermistor on the resistor.

29. (Original) The apparatus of claim 27, wherein the resistor is one of conductive ink and a resistive gold leaf.

30. (Currently amended) The apparatus of ~~claim 25~~ claim 32, wherein the thermistor and heating element are located in the first portion.

Claim 31 (Cancelled).

32. (Currently amended) A fuel vapor pressure and flow [[The]] apparatus of claim 31, wherein the of a fuel system supplying fuel to an internal combustion engine, comprising:
a housing defining an interior chamber;
a pressure sensor located within the interior chamber;
a pressure operable device further includes including:
 a valve separating the interior chamber into first and second portions, the first portion being in continuous fluid communication with a fuel vapor collection canister and the second portion being in continuous fluid communication with a vent port; and
 a poppet movable along an axis and a seal adapted to cooperatively engage the poppet, wherein a first arrangement of the pressure operable device occurs when there is a first negative pressure level in the fuel vapor collection canister relative to the vent port and the seal is in a first deformed configuration, a second arrangement of the pressure operable device permits a first fluid flow from the vent port to the fuel vapor collection canister when the seal is in a second deformed configuration, and a third arrangement of the pressure operable device permits a second fluid flow from the fuel vapor collection canister to the vent port

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when the seal is in an un-deformed configuration, and wherein the pressure sensor signals the first arrangement of the pressure operable device; and
a flow sensor disposed in the first portion of the interior chamber, the flow sensor including a thermistor.

Claim 33 (Cancelled).

34. (Currently amended) The method of ~~claim 33~~ claim 43, wherein the detecting fuel vapor flow further includes detecting a rate of change in temperature using the temperature sensor.

35. (Currently amended) The method of ~~claim 33~~ claim 43, further comprising the step of opening the purge valve, wherein the heating step occurs before the opening of the purge valve.

36. (Original) The method of claim 35, further comprising the step of opening the purge valve, wherein the heating step occurs after the opening of the purge valve.

37. (Currently amended) The method of ~~claim 33~~ claim 43, further including the step of measuring an initial plurality of temperatures of the sensor before detecting a fuel vapor flow.

38. (Currently amended) The method of ~~claim 33~~ claim 43, further including the step of measuring a plurality of temperatures using the sensor wherein the initial measured temperature is greater than the final measured temperature.

39. (Currently amended) The method of ~~claim 33~~ claim 43, further including the step of measuring a plurality of temperatures using the sensor wherein the initial measured temperature is less than the final measured temperature.

40. (Currently amended) The method of ~~claim 33~~ claim 43, further including the steps of:
opening the purge valve, and
synchronizing the opening of the purge valve step with the heating step.

Claims 41 and 42 (Cancelled).

43. (Currently amended) A [[The]] method of claim 42, wherein the providing step further includes: for diagnosing a purge valve of a fuel vapor pressure management system of an internal combustion engine, comprising the steps of:

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providing a housing defining an interior chamber, the chamber containing a pressure operable device separating the chamber into a first portion and second portion, the first portion being in continuous fluid communication with a fuel vapor collection canister and the second portion being in continuous fluid communication with a vent port, the pressure operable device including a poppet being movable along an axis and a seal adapted to cooperatively engage the poppet as the pressure operable device, wherein a first arrangement of the pressure operable device occurs when there is a first negative pressure level in the fuel vapor collection canister relative to the vent port and the seal is in a first deformed configuration, a second arrangement of the pressure operable device permits a first fluid flow from the vent port to the fuel vapor collection canister when the seal is in a second deformed configuration, and a third arrangement of the pressure operable device permits a second fluid flow from the fuel vapor collection canister to the vent port when the seal is in an un-deformed configuration, and the pressure sensor signals the first arrangement of the pressure operable device;

locating a temperature sensor in the first portion;

heating the temperature sensor; and

detecting fuel vapor flow using the temperature sensor and determining, based on the detecting fuel vapor flow, whether the purge valve is purging fuel vapor.

44. (Original) The method of claim 43, further including the step of orientating the poppet so that it is movable along an axis between a first position, a second position, and an intermediate position between the first and second positions.

45. (Original) The method of claim 44, wherein the first and second arrangements of the pressure operable device comprise the poppet in the second position, and the third arrangement of the pressure operable device comprises the poppet in the first position.

46. (Original) The method of claim 45, wherein a spring biases the poppet towards the second position.